## **Kinetic Theory**

Kinetic theory is the **microscopic** theory of an ideal gas. We assume that the gas molecules behave like **pool balls**, i.e., have the following properties.

- The gas consists of a large number of identical molecules.
- The molecules have no internal structure. Their internal energy is purely translational kinetic energy.
- The molecules do not interact, except briefly during the collisions with each other and the wall.
- The collisions are elastic.
- The average distance between the molecules is much larger than the size of the molecules.